AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Original) A powertrain of a vehicle having wheels, the powertrain comprising
- a thermal engine having an output shaft, which when required can be mechanically connected to at least one of the wheels for driving the at least one of the wheels,
 - an energy storage,
- an electric motor, which is mechanically connected to the thermal engine or to the at least one wheel and which is electrically connected to the energy storage and is supplied with electric power from the energy storage for supplying or receiving mechanical power or torque when required,

wherein at least part of filtered air from an air filter of the thermal engine is made to pass in such a way that at least part of the electric motor will obtain cooling from the filtered air.

- 2. (Original) A powertrain according to claim 1, wherein at least part of the filter air is made to pass through an airgap of the electric motor.
- 3. (Original) A powertrain according to any of claims 1-2, wherein at least part of the air is made to pass along permanent magnets of the electric motor.

- 4. (Original) A powertrain according to claims 1-2, wherein at least part of the air is made to pass between windings of the electric motor.
- 5. (Cancelled)
- 6. (New) A powertrain of a vehicle having wheels, the powertrain including a thermal engine and an electric motor for selectively driving at least one of the wheels, the electric motor comprising:
- an inlet for receiving filtered air from an air filter of the thermal engine; and
- channels for receiving said filtered air and making it pass in such a way that at least part of the electric motor will obtain cooling from said filtered air.
- 7. (New) The powertrain of claim 6, wherein said channels include an airgap between a stator and a rotor of the electric motor.
- 8. (New) The powertrain of claim 6, wherein said channels include channels passing along permanent magnets of the electric motor.
- 9. (New) The powertrain of claim 6, wherein said channels include channels passing between windings of the electric motor.

- 10. (New) The powertrain of claim 6 further comprising an energy storage, the thermal engine having an output shaft, which when required can be mechanically connected to said at least one of the wheels for driving it, the electric motor mechanically connected to the thermal engine or to said at least one of the wheels and electrically connected to the energy storage for being supplied with electric power from the energy storage for supplying mechanical power or torque when required or for receiving mechanical power or torque for supplying electric power to the energy storage.
- 11. (New) In a vehicle having wheels and a powertrain including a thermal engine and a electric motor for selectively driving at least one wheel of the vehicle, a method of cooling the electric motor comprising:
- passing air for supply to the thermal engine through an air filter to produce filtered air; and
 providing at least part of the filtered air from the air filter to the electric motor to provide cooling thereof.
- 12. (New) The method of claim 11, wherein at least part of the filtered air is made to flow through an airgap between a stator and rotor of the electric motor.
- 13. (New) The method of claim 11, wherein at least part of the filtered air is made to flow along permanent magnets of the electric motor.

14. (New) The method of claim 11, wherein at least part of the filtered air is made to flow between windings of the electric motor.